Calhoun
Institutional Archive of the Naval Postgraduate School

Calhoun: The NPS Institutional Archive

Institutional Publications | Update NPS

2015-01

Update NPS / January 2015

Naval Postgraduate School (U.S.)

Monterey, California, Naval Postgraduate School

January 2015
http://hdl.handle.net/10945/44996

http://www.nps.edu/library

Calhoun is a project of the Dudley Knox Library at NPS, furthering the precepts and goals of open government and government transparency. All information contained herein has been approved for release by the NPS Public Affairs Officer.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

(U.S. Navy photo by MC2 Chablis J. Torrence)

Assistant Commandant Honors Fall Grads

by NPS Public Affairs

NPS conferred advanced degrees upon hundreds of honored graduates during its quarterly Graduation Ceremony, Dec. 19. Uniquely, though, this Fall Quarter's graduates were recognized in split ceremonies in the Barbara McNitt Ballroom due to renovations in King Auditorium.

NPS President retired Vice Adm. Ronald A. Route welcomed the graduates, their families as well as attending faculty and staff to the ceremony. He shared with the audience that the ballroom they sat in housed NPS' first graduation ceremony in 1949, and was also the location of the institution's official dedication in 1952 by Fleet Adm. Chester Nimitz and Secretary of the Navy, the Honorable Dan A. Kimball.

Route went on to offer his recognition of the university's "citizen students" for their accomplishments both academically on campus, and in the community off campus. He then turned the podium over to commencement speaker Assistant Commandant of the Marine Corps Gen. John M. Paxton Jr. Paxton is the second highest-ranking officer in the Marine Corps.

Paxton referenced iconic moments in history, where critical decisions made by leaders, like those he hopes the graduates will become, made the difference between success and failure.

"In a world of dynamic change, in a world where the tyranny of time and the tyranny of distance are working against us, what we really need are thinkers and problem solvers who are leaders themselves."
– Assistant Commandant of the Marine Corps, Gen. John M. Paxton Jr.

"In a world of dynamic change, in a world where the tyranny of time and the tyranny of distance are working against us, what we really need is thinkers and problem solvers who are leaders themselves, or whose idea can capture the attention of a leader … that's why you are here," said Paxton.

Paxton closed his remarks by referencing words of wisdom from ancient Greek author Thucydides, who once noted, "The nation that will insist on drawing a broad line of demarcation between the fighting man and the thinking man is liable to find its fighting done by fools and its thinking done by cowards."

A total of 356 advanced degrees were conferred upon 352 graduates during the ceremony, including 44 international officers and 71 distance-learning students.

NPS
PRAESTANTIA PER SCIENTIAM
1 9 0 9
NAVAL POSTGRADUATE SCHOOL
UPDATE NPS
January 2015

Iconic Researcher, Teacher Richard Hamming Maintains Lasting Legacy on Campus

By Kenneth A. Stewart

"The purpose of computing is insight, not numbers," once noted renowned mathematician and former Naval Postgraduate School (NPS) Professor Richard W. Hamming. For the man who set aside a lifetime of groundbreaking discoveries for the love of teaching, at a self-imposed $1 per year salary, it would prove to be a prophetic statement indeed.

Hamming passed away 17 years ago this month and held his final lecture at NPS in December of 1997, but his presence is as identifiable on campus as the vibrant red plaid sport coat he frequently donned to draw attention … "Because great ideas require an audience," he would say.

Hamming's name is front and center each year, when the university honors its best teacher with the Richard W. Hamming Award for Teaching, and its top researcher with the Hamming Interdisciplinary Achievement Award. And in Ingersoll Hall, his namesake supercomputer, "The Hamming," continues to support the student and faculty researchers that rely upon it.

Internationally, Hamming may best be known for his self-correcting error codes, the Hamming Codes, which changed the game in computing with regard to the transmission of data. But at NPS, Hamming was best known as a teacher who helped his students learn how to be insightful. His course, "'The Art of Doing Science and Engineering: Learning to Learn," affectionately known as "Hamming on Hamming," was always full and was broadcast to prominent labs throughout the world.

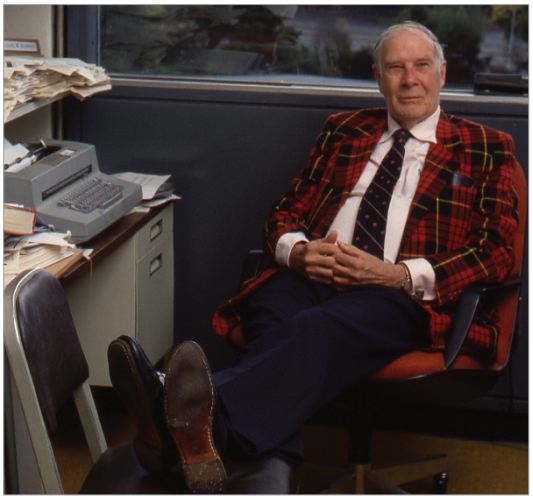
In the classroom, Hamming was quick to go against tradition and was known to ruffle more than a few feathers. But though he was at times eccentric, he was clearly beloved by his students and associates. His varied idiosyncrasies were celebrated rather than derided. An illustrative example that poked fun at his love of chocolate is revealing. He was once gifted with a bit of calligraphy on which was written, "Good teachers get apples, great teachers get chocolate."

He insisted throughout his career that his aim was to inspire – to push the boundaries of what was possible at the time.

"In teaching my classes, I try to smuggle in a little of what it is to do great work – to inspire a few students into greatness. I have always observed that if you do not work on important problems, you are not likely to do important work. Most so called scientists spend all their lives working on 'safe' problems," wrote Hamming.

Current NPS Department of Information Sciences Professor Don Brutzman was a student of Hamming's.

"He was deeply influential on me," said Brutzman. "He used to say, 'If becoming better is important, it must be worth 10 percent of my time.' And he would live up to this maxim by spending Friday afternoons thinking great thoughts and learning about how other people thought," Brutzman recalled.



NPS Professor Richard W. Hamming is pictured in his NPS office, circa 1980s. Hamming taught at NPS for 21 years after working on the Manhattan Project and a successful career at Bell Telephone, where he wrote a series of self-correcting codes, known popularly as the Hamming Codes that are still in use today. (Courtesy photo)

Firmly believing that Hamming's lectures are as relevant today as they were when first offered, Brutzman is leading an effort to relaunch Hamming's course to distance learning students.

"Hamming's capstone course … intended to instill a 'style of thinking' that would enhance one's ability to function as a problem solver of complex technical issues," explained Brutzman. "[His] presentations provided objective analysis about the thought processes and reasoning that took place as Dr. Hamming, his associates, and other major thinkers progressed through … the grand challenges of science and engineering in the 20th century."

NPS Dudley Knox Library Special Collections Manager John Sanders maintains a collection of Hamming's work that spans 50 years. It includes Hamming's thoughts on his many scientific contributions, particularly his aforementioned Hamming Codes.

"[Hamming's codes] laid the foundation for several breakthroughs in computing and information sciences. Contemporary researchers continue to extend the theory and to make practical uses of these codes as the information age unfolds," said Sanders.

Hamming had an obvious passion for teaching, and thoroughly enjoyed working with NPS' unique student body. In fact, it would seem even leaving NPS would be something Hamming preferred to move on from … he completed his final lecture at NPS in mid December, and unexpectedly passed away just three weeks later.

Today, Hamming's legacy continues on across campus through the work of those who have earned awards bearing his name, through the research enabled by his namesake supercomputer, and through his signature course soon to be brought back to life.

"Update NPS" is a monthly publication for students, faculty and staff of the Naval Postgraduate School produced by the Public Affairs Office. For additional copies, comments, or to suggest story ideas, contact the editorial staff at pao@nps.edu.

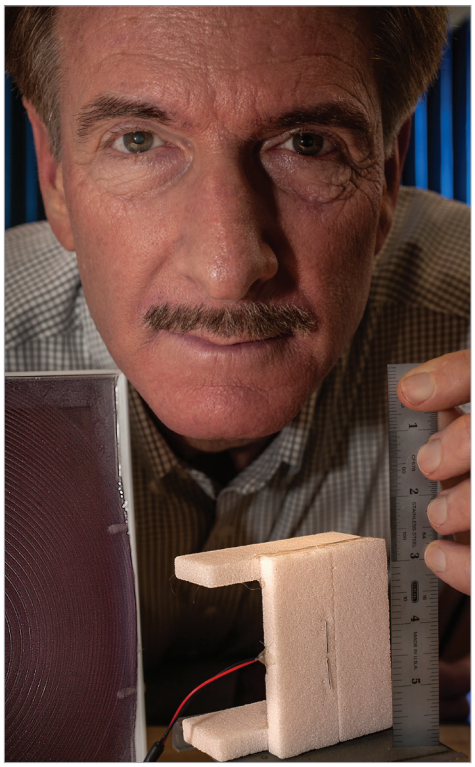
Novel Antenna Tech Leads to Patent

By Kenneth A. Stewart

NPS Professor David Jenn with the Department of Electrical and Computer Engineering (ECE) has been awarded a patent for his Dipole with an Unbalanced Microstrip Feed antenna.

Jenn's antenna, known in the industry as a "rectenna," is small in size, but he hopes that what it lacks in stature will be made up for in functionality.

"I invented a small antenna designed to be integrated into sensor objects and to be used for a wide variety of things," said Jenn. "It is important to [be able to] minimize the size and weight of antennas and feeding circuitry. Linear polarized dipole antennas, like Jenn's rectenna, are commonly used in radar and communications equipment. Conventional dipole antennas use a microstrip transmission line connected to a tuning circuit. Depending on how the circuit is implemented, it increases either the depth or area of the antenna assembly. But unlike traditional dipole antennas, Jenn's does not rely upon a tuning circuit.



Professor David Jenn with the NPS Department of Electrical and Computer Engineering holds his recently patented Dipole with an Unbalanced Microstrip Feed antenna. (U.S. Navy photo by Javier Chagoya)

"Conventional dipole antennas are fed with a tuning circuit known as a balun. The balun is effective at matching the antenna to the dipole, but adds to the size and weight [of the assembly]. The new patented design eliminates the balun, allowing for a small lightweight assembly," Jenn explained.

Without having to contend with balun circuits, Jenn is able to reduce the size and complexity of his antennas and minimize transmission loss.

The small antenna works on the notion that all waves – whether radio, cell or microwave – are energy. If harnessed, those waves can be routed through a circuit and transformed into electrical current, which can be then used to power devices or to charge batteries.

"It's all energy, it's just in one kind of wave and we are converting it to another," explained Jenn. "Once you get the wave into a circuit, you can convert it into AC or DC current."

Because of Jenn's antenna size, it can be used in conjunction with circuits on very small objects. In his past research, he used the same concept to fly very small unmanned aerial vehicles (UAVs).

"In the past, I have used wireless power transmission [WPT] to propel micro UAVs that are only a few inches in size. Such small UAVs can only carry a small amount of fuel, and therefore cannot stay airborne for any useful length of time. WPT allows unlimited flight duration, but the ranges are restricted because the power that can be received decreases with range, just like a radio signal decreases with range from the transmitter," said Jenn.

Jenn has been exploring WPT at the university for quite some time, but the potential for transferring power wirelessly is gaining traction outside the laboratory. Researchers and policy makers are taking a hard look at the possibility of wirelessly powering everything from homes to automobiles.

While Jenn's invention may have more modest applications, it follows the same essential principles explored by these scientists.

With the patent on his rectenna now complete, Jenn has turned his attention to large, phased-array antennas like those used on shipboard radar assemblies and large UAVs like the Predator drone.

FACULTY
news & notes

NPS Department of Systems Engineering Associate Professor Andy Hernandez was presented with the Meritorious Civilian Service Medal by NPS President retired Vice Adm. Ronald A. Route. A retired Army colonel and NPS doctoral graduate, Hernandez was recognized for his instrumental efforts in strengthening the Naval Research Program, a joint research partnership with senior Navy and Marine Corps leadership to provide a direct connection between student research at the university, and the immediate needs of the services.

Members of the Meals on Wheels of the Monterey Peninsula (MOWMP) Board of Directors gathered for their annual holiday luncheon in the Tower Room of Herrmann Hall, Dec. 10. Applied Mathematics Senior Lecturer Bard Mansager currently serves the organization as president of the MOWMP Board.

Mansager says the organization's mission and dedication to promoting good health and the highest quality of living are exceptionally important, especially during this time of year.

"Holiday time can be very lonely for many seniors in our community. Our volunteers are making daily deliveries of food and providing important human interaction," said Mansager.

NPS Center for Civil Military Relations (CCMR) Director Scott Jasper and Scott Moreland were recently featured in the Small Wars Journal. They discussed the so-called Islamic State as a hybrid organization that combines conventional military tactics with terrorist and criminal activity.

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.

CRUSER Contemplates Drones, Foreign Policy

By MC2 Shawn J. Stewart

NPS faculty and researchers recently gathered in Bullard Hall to join the national debate on drones and drone technology. The Council on Foreign Relations (CFR) invited NPS and other universities to join the discussion through their Academic Conference Call series.

Entitled "The Implications of Drones on U.S. Foreign Policy," NPS faculty and researchers listened in as Cornell University Associate Professor of Government Sarah E. Kreps and Micah Zenko, a Douglas Dillon Fellow with the Center for Preventive Action, discussed the proliferation of unmanned aerial vehicles (UAV) and the consequences they have on U.S. and foreign relations.

NPS Department of Defense Analysis Assistant Professor Bradley Strawser poses a question on the morality of drone proliferation during an academic conference call held in Bullard Hall, Dec. 4. (U.S. Navy photo by MC2 Shawn J. Stewart)

"There are two big policy questions," said Kreps. "One is the arms race of other countries in pursuit of this technology; that's the demand side. The other side is the supply side, and the U.S. has gone to interagency review about what its export policies should be."

Zenko provided an overview of the use of UAVs and why U.S. public policy matters.

"We're interested in how armed drones are being used outside of battlefields … which is more controversial [than the drones are]," said Zenko. "We started using them to go after Osama Bin Laden in 2001 and by November 2002 we started using them outside of battlefield situations."

According to Zenko, as drone capabilities increase, so too will their proliferation. He also noted their ability to collect information while loitering undetected over targets for long periods of time without putting pilots at risk.

"Wealthy countries like France, Germany and Russia have been trying to acquire [advanced armed drone technology] indigenously and have been unable to do so," said Kreps. "What we are trying to suggest is this isn't a story of rampant armed drone proliferation."

During the call, NPS Department of Defense Analysis Assistant Professor Bradley Strawser was given the opportunity to share his own views on the morality of drone usage.

"I appreciate the fact that drones are a disruptive technology in foreign relations, [but] I'm not convinced that we have a strong moral argument to limit their proliferation," said Strawser. "The reason for that is because they appear to be a moral improvement over other forms of weapons because they limit the risk to human pilots … are more precise, and they limit collateral damage when compared to other uses of force."

Strawser continued, "You're right, [drones do] lower the threshold for the use of force … and they lower the threshold in response to them [as well]. But perhaps those are both good things, perhaps they are strangely a moral improvement. If there are cases where we think a use of force is justified, then its only right we use the best most precise weapon we have, and can limit the risk to us," he said.

Big Ideas Exchange Showcases NPS Research

By MC3 Michael Ehrlich

NPS Department of Defense Analysis Chair, Professor John Arquilla helped kick off NPS' Big Ideas Exchange (BIX) at the MAE Auditorium, Dec. 5th.

BIX is an NPS initiative designed to encourage new and potentially game-changing thinking developed by NPS students and faculty that addresses grand challenges in U.S. national security.

"We live in a time where the nature of conflict is being transformed," said Arquilla who went on to discuss the downward spiral faced by defense budgets and manpower reductions that necessitate innovative thinking.

"We are going to have to make up for those constraints with big ideas," continued Arquilla.

BIX allows NPS students and faculty to present potential advances and approaches to national security in their respective fields. NPS Professor Timothy Chung welcomed the opportunity to participate.

"This is just a snapshot of all the great work that is being done on campus," said Chung.

"What we want to do with this event is to let the larger defense community know that the NPS is a place of big ideas," added Arquilla. "Across all the departments on campus here at NPS, there are ideas that will save lives, money and time and allow us to begin doing the business of national security in unique ways."

NPS Professor Selected as Next AFIT Provost

By Kenneth A. Stewart

NPS Professor Sivaguru S. Sritharan has been selected to serve as the provost of the Air Force Institute of Technology (AFIT). Sritharan currently serves as the director of NPS' Center for Decision, Risk, Controls and Signals Intelligence, and is a former dean of the Graduate School of Engineering and Applied Sciences (GSEAS).

"When this opportunity came around, it was really a dream come true," said Sritharan. "When I came to the U.S. from Sri Lanka in 1978, I wanted to achieve a position where I could advocate for the aeronautical and space science disciplines."

"Serving as the provost is really the pinnacle of my career. It allows me to take what I have accomplished at GSEAS to a whole new level," he continued.

Sritharan became intrigued by AFIT after exploring the various domains in which the Air Force operates and the scientific disciplines relevant to its mission. He is convinced that these are areas in which he can make a significant contribution.

"My vision is to determine how I can link up with the Air Force across the Department of Defense enterprise to achieve world leadership in those areas," he said.

AFIT is the Air Force's graduate school of engineering and management as well as its institution for technical professional continuing education. A component of Air University, AFIT provides defense-focused graduate and professional continuing education and research to sustain the technological supremacy of the U.S. air and space forces.

Dudley Knox Library Launches New Website

By MC3 Michael Ehrlich

NPS' Dudley Knox Library (DKL) launched its completely redesigned website, Dec. 28, with site administrators confident the new site will better enable its NPS student and faculty users to be more successful learners, researchers and educators.

"Our basic strategy is to curate a web presence to help our primary users, which are students and faculty," said DKL Web Services Librarian and co-chair of the library's web working group, Stacy DeMatteo. "We want all users to quickly and easily find what they need."

The process for realigning the DKL website began more than 18 months ago with dedicated research into modern web design, content authoring and strategy, detailed analytics and user input.

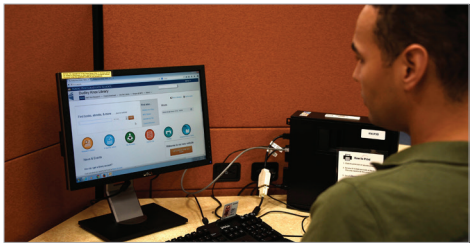
Through a series of interviews with students and faculty, several changes were made to the structure of the DKL site and its homepage. Some additions include clearly defined search engines, links to specific NPS courses, and a "tool belt" for performing some of the more common tasks, such as printing from a laptop, finding articles or eBooks, and searching the latest NPS theses.

"We did a top task survey to discover what [users] come to the library's website to do," said DeMatteo. "Our library liaisons have also worked with the professors to tailor the website to the students' needs."

The result is a site that has been condensed from more than 800 pages on the previous site to less than 100 currently, as well as a web presence that capitalizes on the capabilities of NPS' new content management system (CMS).

"Through the whole process we were able to move to about 89 pages on a more modern CMS, Liferay," said Library Systems Manager Kathy Norton, DeMatteo's co-chair on the web working group. "This also reduces the overall maintenance on the content within these pages."

The website has also been designed to accommodate the many resources DKL makes available to students from a sensible, user-centric perspective.



U.S. Army Capt. Leo Raabe accesses the Dudley Knox Library's (DKL) new website, Dec. 31.
(U.S. Navy photo by MC2 Chablis Torrence)

CAMPUS news & notes

International Graduate Programs Office (IGPO) Director retired U.S. Marine Corps. Col. Gary Roser was recently presented with the Navy Superior Civilian Service Award. Roser retired after 23 years of service at NPS. He was recognized for guiding the university's international graduate programs, where he has advised and counseled hundreds of international students representing 114 nations worldwide.

U.S. Army Training and Doctrine Command (TRADOC) Commanding Gen. David G. Perkins presented a mixed group of NPS students, faculty and DLIFLC senior staff with an overview of the new Army Operating Concept entitled "Win in a Complex World," Dec. 9. The doctrine establishes a formal road map to enable the Army to fight and win future battles in complex, unknown environments.

U.S. Coast Guard Cmdr. Marc Aparicio, was presented with the Military Officers Association of America (MOAA) Joint Service Warfare Award by MOAA President retired Vice Adm. Norbert R. Ryan Jr., during NPS' Fall Quarter Awards Ceremony, Dec. 9. The MOAA-sponsored award recognizes significant contributions to the study, implementation and spirit of joint service warfare.

THIS MONTH ON INSIDE NPS

- Interview with Dr. Rohan Gunaratna
- A Look at the "Black Swan" MMOWGLI
- Update of NPS CUBE SAT EFFORTS
- Highlights of NPS' Peace Game

"INSIDE NPS" AIRS MONTHLY ON THE DEFENSE NEWS NETWORK

Send your campus news and notes to update@nps.edu.

Fall Quarter Graduate's Research Recognized by Navy Oceanographer

By Kenneth A. Stewart

Recent NPS graduate Lt. Cmdr. Kathryn "Kate" Hermsdorfer was recognized for academic excellence by Oceanographer of the Navy, Rear Adm. Jonathan W. White, for work that she conducted at NPS on unmanned vehicles.

"I am working with the Sensor Hosting Autonomous Remote Craft (SHARC) Wave Glider," said Hermsdorfer.

The SHARC Wave Glider, created by Liquid Robotics, is an unmanned watercraft powered by the energy generated through the natural swelling of waves on the ocean's surface. These craft can be deployed for long periods of time, and are equipped with a variety of sensors and communications packages that allow operators to monitor their progress as they propel across the sea gathering data, which is wirelessly transmitted to control centers on the coast.

The SHARC Wave Glider is interesting to Navy meteorologists because of its persistence, and resilience. It can operate in hurricane conditions, and unlike other commercial buoy systems, it can be remotely moved from one area of interest to another and remain on the water for long periods of time.

"We are excited with this particular Wave Glider, because we have the ability to steer the craft by controlling it through an iridium network," Hermsdorfer explained.

Hermsdorfer worked with a small team of engineers and meteorologists to evaluate the SHARC's sensing capabilities and then to develop a sensor better suited to naval meteorological operations.

"SHARC comes with a weather sensor, my first step was to evaluate the commercial sensor and the data it collects. We then developed and integrated a suite of off-the-shelf sensors that better suit our needs," said Hermsdorfer. "I worked primarily on evaluating the sensors, while the team focused on the mechanics of incorporating the off-the-shelf sensors to the craft."

Meteorology and oceanography graduate Lt. Cmdr. Kate Hermsdorfer was recently recognized for excellence by Oceanographer of the Navy Rear Adm. Jonathan White. (U.S. Navy photo by Javier Chagoya)

Hermsdorfer's work also caught the attention of the Space and Naval Warfare Systems Command (SPAWAR). SPAWAR offered Hermsdorfer a fellowship and a $10,000 grant to further her research in conjunction with a SPAWAR mentor.

"[The fellowship] really serves two purposes … It feeds my research and it gives me a better understanding of SPAWAR so that I can better support things that they are looking at as well," said Hermsdorfer.

Hermsdorfer will continue to rely upon the lessons she learned at NPS as she branches out and applies her graduate education to naval challenges.

"NPS has been invaluable … One of the things that everyone says, but you do not really appreciate until you go through the process, is that NPS helps you to develop a problem-solving thought process," she said.

"By conducting my research and working my experiments, I have been able to develop a set of problem-solving skills that I will rely upon in the future," stressed Hermsdorfer.

Focus On… Network Excellence

A Monthly Look at Names and Faces on Campus

Deputy Chief Information Officer Terri Brutzman, formerly with NPS' Information Technology and Communication Services (ITACS), was awarded the Navy Meritorious Civilian Service Award in recognition for her service to NPS, Dec. 16.

She has taken a new position at the Defense Language Institute Foreign Language Center.

"I'm really looking forward to the challenges a new job brings, but I'll still have close ties with the NPS staff," said Brutzman.

"There is so much yet to be discovered in the world of computing and it's my curiosity that keeps me interested in what I do. I look forward to the challenges in my next role as DLI's Chief Information Officer," she continued.

Brutzman has served at NPS for the last seven years. Notably, her work was instrumental to NPS' succesful .mil to .edu. network transition.

"This involved researching Navy Information Assurance and IT management instructions, and working with high level [Department of the Navy] staff to understand current policy, and the drivers behind the policy, to discern alternate methods of ensuring security while allowing us the flexibility to execute our education and research mission," explained Brutzman.

Brutzman has been with NPS since 1990, first as a staff lieutenant commander and then as a student, earning a Master's of Science in Management. She also served a follow-on tour with the Naval Support Activity Monterey.

Deputy Chief Information Officer Terri Brutzman

Any Day at NPS ...

Janice Griffin as Ms. Claus tosses candy to children at the annual Teddy Bear Tea at Herrmann Hall, Dec. 13. *(U.S. Navy photo by MC2 Chablis J. Torrence)*

Assistant Commandant of the Marine Corps Gen. John M. Paxton Jr., the second highest-ranking officer in the Marine Corps, addresses students, faculty and staff during NPS Fall Graduation Ceremony. *(U.S. Navy photo by MC2 Chablis Torrence)*

The 61st graduating class from the Naval War College (NWC) Monterey partnership with NPS for Joint Professional Military Education (JPME) stands for a group portrait in the Barbara McNitt Ballroom of Herrmann Hall, Dec. 11. *(U.S. Navy photo by MC3 Michael Ehrlich)*

NJROTC students listen to a brief by U.S. Air Force Lt. Col. Lance Wilkins, Dec. 12. The students traveled to NPS to learn about the respective uniformed services. *(U.S. Navy photo by MC2 Sean Stewart)*

Recently constructed vertical axis wind turbines tower over Research Associate Professor Anthony Gannon, left, NPS student Cmdr. Rex Boonyobhas, center, and Mechanical and Aerospace Engineering Chair Professor Garth Hobson, right, at NPS' Turbo Propulsion Lab. Gannon and Hobson are advising Boonyobhas' as he uses the system to explore renewable-energy powered chilling and air-conditioning. *(U.S. Navy photo by Javier Chagoya)*

STUDENT voice

By Lieutenant Aaron Steward, Chairman, President's Student Council

As the recently elected Chairman of the President's Student Council, I want to welcome all of the new students to the Naval Postgraduate School (NPS) and thank those students who have gotten involved in making their studies at NPS a time to remember.

January is a month of new beginnings and New Year's resolutions. This year's President's Student Council (PSC) is no exception. With the New Year, the student council will expand its membership to provide the student body greater leadership opportunities here at NPS.

We look forward to new students getting involved as student council and program representatives. We will expand our efforts and reach out to the local communities to bring military leadership and experience into local high school classrooms and volunteer organizations. The PSC will also begin new initiatives to keep the student body better informed and aware of the activities NPS has to offer.

The PSC hopes one of your new year's resolutions will be to get involved with an NPS organization. The PSC is currently seeking volunteer leaders who can bring fresh perspectives and enthusiasm to our growing organization.

The PSC meets on the first Tuesday of every month. Our next meeting will be held, January 6 at 3:00 p.m. at the Dudley Knox Library in room 263A. We look forward to seeing you at our next meeting and wish everyone a Happy New Year.

Have a story to share? Public Affairs is constantly seeking interesting news and stories for Update NPS. Send your tips to pao@nps.edu.

On Campus this Month

Jan 1

New Year's Day

Jan 5

First Day of Classes

Jan 15

New Spouse Orientation
6:00-8:00 p.m. at the Barbara McNitt Ballroom

Jan 15

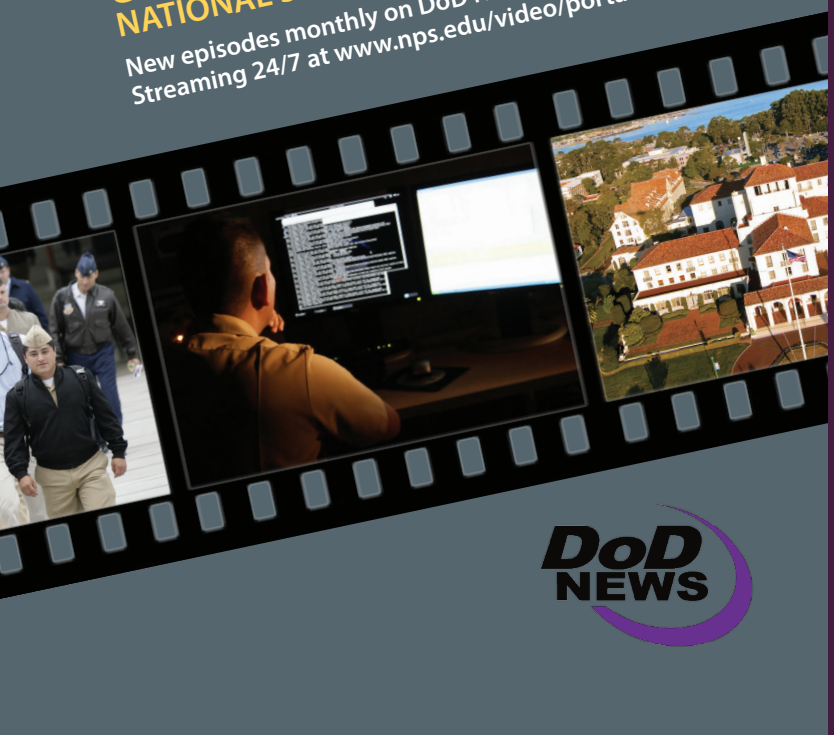
Navy Wide E-7 Exam

Jan 19

Dr. Martin Luther King Jr. Day
(No classes)

Jan 21

Data Management & Access Faculty Seminar
12:00-1:00 p.m. at Ingersoll 122



Historical Highlights

Hank Ketcham, creator of Dennis the Menace, began his cartooning career in World War II with a sailor named Half Hitch and his constant companion, a sea gull. Ketcham revived Half Hitch in 1987 with a cartoon (below) to help NPS welcome the USS Missouri (BB 63) for a Monterey port visit. The battleship's historic call commemorated the 1908 visit of President Teddy Roosevelt's Great White Fleet, including the steam-powered USS Missouri (BB 11).

Historical Highlights are provided by the Dudley Knox Library.